

Title (en)
Power diode

Title (de)
Leistungsdiode

Title (fr)
Diode de puissance

Publication
EP 0869560 A3 19990107 (DE)

Application
EP 98106152 A 19980403

Priority
DE 19713962 A 19970404

Abstract (en)
[origin: DE19713962C1] The diode has an inner zone (2), a cathode zone (3) with the same conductivity and a higher doping concentration, a coupling zone (5) with a higher doping concentration than the inner and a lower doping concentration than the cathode zone and an anode zone (6) with the opposite conductivity and a higher doping concentration than the coupling zone. A second coupling zone (4) lies between the first coupling zone and the inner zone, having the same conductivity as the anode zone and a higher doping concentration than the inner zone.

IPC 1-7
H01L 29/864; **H01L 29/861**; **H01L 29/06**; **H01L 27/08**

IPC 8 full level
H01L 29/861 (2006.01); **H01L 29/864** (2006.01)

CPC (source: EP US)
H01L 29/861 (2013.01 - EP US); **H01L 29/864** (2013.01 - EP US); **Y02E 10/548** (2013.01 - EP)

Citation (search report)

- [A] US 2899646 A 19590811
- [A] PATENT ABSTRACTS OF JAPAN vol. 008, no. 066 (E - 234) 28 March 1984 (1984-03-28)
- [DA] KASCHANI K T ET AL: "How to avoid TRAPATT oscillations at the reverse-recovery of power diodes", 1995 INTERNATIONAL SEMICONDUCTOR CONFERENCE. CAS 95 PROCEEDINGS (CAT. NO.95TH8071), 1995 INTERNATIONAL SEMICONDUCTOR CONFERENCE. CAS 95 PROCEEDINGS, SINAIA, RO, 11 October 1995 (1995-10-11) - 14 October 1995 (1995-10-14), ISBN 0-7803-2647-4, 1995, New York, NY, USA, IEEE, USA, pages 571 - 574, XP002083496

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CN107452623A

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
DE 19713962 C1 19980702; EP 0869560 A2 19981007; EP 0869560 A3 19990107; JP 3833387 B2 20061011; JP H10284738 A 19981023; US 5977611 A 19991102

DOCDB simple family (application)
DE 19713962 A 19970404; EP 98106152 A 19980403; JP 10333598 A 19980331; US 5579598 A 19980406